

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

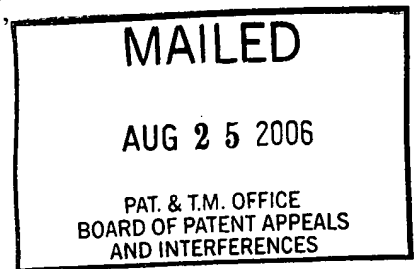
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAL FRENGER, ERIK DAHLMAN,
and STEFAN PARKVALL

Appeal No. 2006-2013
Application No. 09/643,983

HEARD: Aug. 9, 2006



Before KRASS, SMITH, JERRY, and BLANKENSHIP, Administrative Patent Judges.

SMITH, JERRY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-11, 13-16, 18-23, 26, 28-39, 41-47, 50, 52, and 53, which constitute all the claims pending in this application.

The disclosed invention pertains to a method and apparatus for processing data packets for transmission over a communications channel. Pre-processing is performed on the data packets by performing a first coding operation on the packets that does not depend on a current channel condition. The pre-processed data packets are then

processed by a modulation scheme and a coding rate based on a detection of the current channel condition.

Representative claim 1 is reproduced as follows:

1. A method for processing data packets for transmission over a communications channel, comprising:

pre-processing data packets for transmission over the communications channel including performing a first coding operation on those data packets to form pre-processed data packets;

detecting a current channel condition; and

processing the pre-processed data packets including modulating the pre-processed data packets using a modulation scheme selected from a group of different modulation schemes based on the detected current channel condition and coding the pre-processed data packets using a coding rate selected from a group of different coding rates based on the detected current channel condition to form processed data packets ready for transmission over the communications channel,

wherein the pre-processing does not depend on the current channel condition.

The examiner relies on the following references:

Ward et al. (Ward)	5,701,294	Dec. 23, 1997
Park et al. (Park)	6,397,367	May 28, 2002
		(filed June 07, 1999)

“3rd Generation Partnership Project,” Technical Specification Group Radio Access Network; Multiplexing and Channel coding (FDD) [3G TS 25.212 version 3.1.0] (hereinafter 3GPP).

Stephen B. Wicker, “Error Control Systems for Digital Communication and Storage,” Prentice-Hall, 1995, pages 392-409.

The following rejections are on appeal before us:

1. Claims 1-4, 10, 34, and 35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the disclosure of Ward.
2. Claims 5 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Ward in view of Park.
3. Claims 6-9, 13-16, 37-39, and 42-44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Ward in view of 3GPP.

4. Claims 11 and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Ward taken alone.

5. Claims 18-21 and 45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Ward in view of 3GPP and Wicker.

6. Claims 22, 23, 26, 28-30, 46, 47, 50, and 52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Ward in view of 3GPP and Park.

7. Claims 31-33 and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Ward in view of 3GPP, Park, and Wicker.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon fails to support any of the examiner's rejections of the claims on appeal. Accordingly, we reverse.

We consider first the rejection of claims 1-4, 10, 34, and 35 as being anticipated by Ward. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Assocs. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

The examiner has indicated how these claims are deemed to be fully met by the disclosure of Ward [answer, pages 6-9]. Appellants argue that Ward fails to disclose the claimed division of processing operations into pre-processing operations that do not

depend on the current channel condition and processing operations that do depend on the current channel condition. Specifically, appellants argue that each of the operations performed in Ward depend on the current channel condition, and the combination type in Ward is not selected until the current channel condition is known [brief, pages 10-14].

The examiner responds that the selection of speech coding in Ward does not depend on monitored channel conditions because the LDCELP compression pre-processor in the speech encoder is not a dynamically adaptable device and the A/D converter is not a dynamically adaptable device. The examiner also observes that Ward teaches continuous channel monitoring, and that Ward dynamically adapts the coding rate based on previous monitored conditions. The examiner also asserts that a communication channel includes everything that appears in Figure 3A of Ward [answer, pages 18-28].

Appellants respond that the examiner's interpretation of a communication channel is contrary to the common meaning of the term and to its meaning as described in appellants' specification. Appellants also assert that the claimed "current channel condition" refers back to the detected current channel condition in the claims. Appellants argue that the speech coder of Ward does not meet the pre-processing of the claims because the claimed pre-processing refers to data packets and includes a first coding operation on those data packets, which is not met by the analog processing and A/D converting in Ward. Appellants also assert that vocoding is not packet coding and the vocoder output must still be packetized. Appellants also respond that the continuous monitoring in Ward does not suggest the claimed invention because the selection of the combination type in Ward is still based on the current detected channel condition [reply brief].

We will not sustain the examiner's rejection of claims 1-4, 10, 34, and 35 as being anticipated by Ward for essentially the reasons argued by appellants in the briefs. We agree with appellants' arguments in the reply brief as to why the speech coding in Ward does not meet the claimed pre-processing. The examiner has failed to even address these arguments. We also agree with appellants' arguments in both briefs that Ward does not disclose the claimed pre-processing. The selection of the combination type to be used in Ward is based only on the current channel condition. The combination type used in a previous interval that was based on a previous channel condition does not constitute pre-

processing with respect to the current combination type because the selected combination type based on the current channel condition must be based on a complete recalculation of the relative cost factors for each combination type.

We now consider the rejections of the claims under 35 U.S.C. § 103. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). The examiner must articulate reasons for the examiner's decision. In re Lee, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). In particular, the examiner must show that there is a teaching, motivation, or suggestion of a motivation to combine references relied on as evidence of obviousness. Id. 277 F.3d at 1343, 61 USPQ2d at 1433-34. The examiner cannot simply reach conclusions based on the examiner's own understanding or experience - or on his or her assessment of what would be basic knowledge or common sense. Rather, the examiner must point to some concrete evidence in the record in support of these findings. In re Zurko, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Thus the examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the examiner's conclusion. However, a suggestion, teaching, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, motivation, or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. In re Kahn, 441 F.3d 977, 987-88, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (citing In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000)). See also In re Thrift, 298 F. 3d 1357, 1363, 63 USPQ2d 2002, 2008 (Fed. Cir. 2002). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the

prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered and are deemed to be waived [see 37 CFR § 41.37(c)(1)(vii)(2004)].

Since each of the examiner's rejections of the claims under 35 U.S.C. § 103 relies primarily on the examiner's interpretation of Ward, and since we have determined that the examiner's findings with respect to Ward are erroneous, we find that the examiner has failed to establish a prima facie of obviousness with respect to any of the rejected claims. Therefore, we cannot sustain any of the examiner's rejections of the claims under 35 U.S.C. § 103.

In summary, we have not sustained any of the examiner's rejections of the claims on appeal. Therefore, the decision of the examiner rejecting claims 1-11, 13-16, 18-23, 26, 28-39, 41-47, 50, 52, and 53 is reversed.

REVERSED

Encl. 1. 2

Errol A. Krass
Administrative Patent Judge

Jerry Smith
Jerry Smith

Jerry Smith
Administrative Patent Judge

Howard B. Blankenship

Howard B. Blankenship
Administrative Patent Judge

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